Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
BIT/State Radio Communications Engineering's	)	File Nos. 0003081467 et al.
Requests for Extension/Waiver of Time to	)	
Construct	)	

ORDER OF MODIFICATION

Adopted: May 24, 2019 **Released: May 24, 2019**

By the Chief, Mobility Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. In this *Order of Modification* (Order), the Mobility Division (Division) of the Wireless Telecommunications Bureau (Bureau) modifies certain Part 22 VHF/UHF paging licenses operated by BIT/State Radio Communications Engineering (South Dakota or the State)[1] to facilitate implementation of the South Dakota Interagency Communications System (SDICS or the System) – a statewide, interoperable, digital trunked public safety radio system. This action will enable South Dakota to keep portions of the license areas where it was operating as of the applicable construction deadlines and maintain the functionality of its statewide public safety network.

II. BACKGROUND

2. SDICS supports a variety of public safety operations, including Police and Fire Departments, as well as all ambulance/EMS and emergency care medical facilities through the State of South Dakota Department of Health.[2] The radios on the System allow for inter-agency interoperability, as well as enabling individual agencies to maintain private communications.[3] In 2007 and 2009, facing the expiration of the license terms for some of its Part 22 VHF/UHF Paging licenses, South Dakota sought a determination from the Commission that it met the Commission's substantial service requirement or, alternatively, requested that the Commission waive and/or extend the construction deadlines.[4]

3. *Order and Proposed Order of Modification* (*Order and POM*).[5] On February 4, 2019,

[1] In the Commission's Universal Licensing System (ULS), South Dakota's paging licenses are listed under "BIT/State Radio Communications Engineering" which is a reference to the Bureau of Information & Telecommunications of the State of South Dakota.

[2] *See* Amended Statement in Support of Substantial Service/Request for Extension of Time to Construct by BIT/State Radio Communications Engineering, State of South Dakota, Bureau of Information & Tel (filed, Oct. 30, 2007) (*2007 Extension/Waiver Request*) at 1; Statement in Support of Substantial Service/Request for Extension of Time to Construct by BIT/State Radio Communications Engineering (filed, May 11, 2009) (*2009 Extension/Waiver Request*) at 1.

[3] *2007 Extension/Waiver Request* at 2.

[4] *Id*. at 1.

[5] *BIT/State Radio Communications Engineering's Requests for Extension/Waiver of Time to Construct*, Order and Proposed Order of Modification, DA 19-41, 2019 WL 458018 (F.C.C. Feb. 4, 2019), Erratum Order (rel. Feb. 19, 2019) (*Order and POM*).

the Division issued an *Order and Proposed Order of Modification* pursuant to Section 316 of the Communications Act, proposing in the public interest to modify certain licenses to permit the State to keep the areas it had constructed by the applicable construction deadlines, rather than terminate the licenses in their entirety.[6] The *Order and POM* also dismissed the State's construction notifications that failed to show construction, but granted a partial waiver of the construction requirements for certain authorizations.[7] The Division found that the proposed modification of South Dakota's authorizations would be consistent with the Commission's "fundamental obligation to promote safety of life and property through the use of wire and radio communications."[8]

4. In the *Order and POM*, the Division identified the following Part 22 Paging licenses for modification: WPVF200, WPVF202, WPVF203, WPVF204, WPVF205, WPVF207, WPVF208, WPVG844, WPVG846, WPVG847, WPVG848, WPVG992, WQAD635, WQAD643, WQAD650, WQAD652, WQAD653, WQAD654, WQAD656, WQAD657, and WQAD659.[9] In doing so, the Division recognized South Dakota's legitimate interest in continuing to operate its statewide public safety network. The Division also granted limited extensions of time (until September 30, 2013, and November 30, 2014) with respect to three authorizations (WQAD650, WQAD653, and WQAD672).[10]

5. Finally, the Division noted that pursuant to Section 316(a)(1) of the Act, no proposed order of modification becomes final until the license holder has been provided at least 30 days to protest the proposed order.[11] The Period for filing protests to the *Order and POM* closed on March 6, 2019, and no party protested any of the proposed modifications.[12] Accordingly, South Dakota is deemed to have consented to the proposed modifications.[13]

III. DISCUSSION

6. The authority to modify licenses under Section 316(a)(1) is well established and courts have recognized the Commission's "broad power" to do so, explaining that the Commission "need only find that the proposed modification serves the public interest, convenience and necessity."[14] In light of

[6] *Id*. at 2.

[7] *Id.* at 1-2. Section 316(a)(1) of the Communications Act authorizes the Commission to modify a station license if, in its judgment, "such action will promote the public interest, convenience, and necessity, or the provisions of this chapter."

[8] *Id.* at 8, citing 47 U.S.C. § 151.

[9] *Id.* at 8, para. 18.

[10] *Id.* at 10, para. 27.

[11] The Division prescribed a 30-day period to file protests of the proposed license modifications, commencing on February 4, 2019 (the public release date of the *Order and POM*). *Id*. at 9, para. 23.

[12] Although South Dakota filed a Petition for Reconsideration of the *Order and POM* on March 6, 2019, its petition does not challenge any of the 21 licenses modified by today's Order. Rather, it seeks restoration of 17 different licenses (Call Signs WPVG879, WPVG880, WPVG881, WPVG882, WPVG988, WPVH584, WPVH586, WPVF209, WPVF212, WPVF213, WPVF214, WQAD658, WQAD664, WQAD674, WQAD675, WQAD676, WQAD677) that the Division found had automatically terminated, as a matter of law, by their respective construction deadlines because the State failed to show any construction for these authorizations. *See* Petition for Reconsideration by BIT/State Radio Communications Engineering Radio Service CP, DA 19-41 (filed Mar. 6, 2019). This Order does not address the terminated authorizations or the State's arguments to reinstate them.

[13] *See* 47 CFR § 1.87(h).

[14] *California Metro Mobile Communications v. FCC,* 365 F.3d 38, 45 (D.C. Cir. 2004); *see also Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Services in the Upper and Lower L-Band*, Report and Order, IB Docket 96-132, FCC 02-24, 17 FCC Rcd 2704, 2714, ¶ 25 (2002) (citing *Rainbow Broadcasting Co. v. FCC*, 949 F.2d 405 (D.C. Cir. 1991) ("the Commission is afforded significant latitude when it exercises its Section 316 authority") (subsequent history omitted).

the overriding public interest in maintaining the functionality of South Dakota's public safety network, we find it in the public interest to modify South Dakota's authorizations consistent with the *Proposed Order of Modification*. Accordingly, we hereby modify 21 of South Dakota's paging licenses (WPVF200, WPVF202, WPVF203, WPVF204, WPVF205, WPVF207, WPVF208, WPVG844, WPVG846, WPVG847, WPVG848, WPVG992, WQAD635, WQAD643, WQAD650, WQAD652, WQAD653, WQAD654, WQAD656, WQAD657, and WQAD659) as follows:

- For each license listed above, we authorize South Dakota to retain the areas in which it is using its Part 22 Paging frequencies as described herein, with the modified boundaries of the license determined by the formula in the Part 22 rules.[15] The remainder of these specific licensed market areas are hereby terminated and, as such, revert to the Commission.
- Section 22.567(d) of our rules describes the formula to be used in determining a VHF channel transmitter's interfering contour (the area beyond which signals from the transmitter are deemed not to be causing interference to another transmitter). Using the technical parameters of South Dakota's operations as of the respective construction deadlines applicable to each license, we have calculated an interfering contour using 22.567(d),[16] and modified the license boundary for each license at issue based on the interfering contour. These modified license boundaries are shown in the Appendix attached hereto.
- The interfering contour as calculated above defines the modified license boundary for each call sign listed, except where that contour reaches beyond the geographic market boundary. In those cases, the modified license area ends at the market boundary.

7. Pursuant to the *Order and Proposed Order of Modification*, we also require South Dakota, as a condition of our modification of these licenses and the technical waivers that were necessary to bring South Dakota's operations into compliance with our rules,[17] to notify the Division by August 5, 2019 (within six months of the effective date of the *Order and POM*) that it has obtained concurrences from neighboring licensees that South Dakota's modified licenses do not harmfully interfere with their operations.[18] Alternatively, South Dakota may forgo the waiver, and either implement an alternative solution that complies with our current rules or cease operation.

8. Any licenses that do not comply with the Part 22 rules or with the waiver conditions set forth in the *Order and POM* by August 5, 2019, will automatically terminate as of that date.

IV. ORDERING CLAUSES

9. Accordingly, IT IS ORDERED that, pursuant to Section 4(i) and 316(a) of the Communications Act, as amended, 47 U.S.C. §§ 154(i), 316(a) and Section 1.87 of the Commission's rules, 47 CFR § 1.87, the licenses listed in the Appendix, ARE MODIFIED as specified in Section III of this Order of Modification, effective upon release of this Order.

10. IT IS FURTHER ORDERED that, pursuant to Section 316(a)(1) of the Communications Act of 1934, as amended, 47 U.S.C. § 316(a)(1), the Wireless Telecommunications Bureau SHALL SEND this Order of Modification by certified mail, return receipt requested, to the State of South Dakota.

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[15] 47 CFR § 22.567(d).

[16] The technical criteria found in Section 22.567(d) are specific to paired frequencies identified in Section 22.561. Accordingly, the interfering contours in this case have been calculated using the technical criteria associated with the applicable licensed channel block.

[17] *See Order and POM* at 6-7, paras. 14-15.

[18] *Order and POM* at 7, para. 15.

11. These actions are taken under delegated authority pursuant to sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Roger S. Noel
Chief, Mobility Division
Wireless Telecommunications Bureau

APPENDIX

Call Signs

WPVF200, WPVF202, WPVF203, WPVF204, WPVF205, WPVF207, WPVF208, WPVG844, WPVG846, WPVG847, WPVG848, WPVG992, WQAD635, WQAD643, WQAD650, WQAD652, WQAD653, WQAD654, WQAD656, WQAD657, and WQAD659.

Modified License Areas

The modified boundaries of each license area are defined by the interference contour(s) of its base transmitter(s) as calculated pursuant to Section 22.567(d). The following maps depicting the modified license areas of each call sign were derived using technical information provided by the State of South Dakota.[19] The tables below detail the base transmitter information provided by South Dakota, including location(s) of the base transmitter(s) being used for the call sign, effective radiated power (ERP), antenna height, and height above average terrain (HAAT) data. The tables also specify the distances from each base transmitter to its interfering contour along the eight radials that were calculated using South Dakota's technical data.

Contour Information for Call Signs subject to Section 22.567(d)

Call Sign	Location	Latitude, Longitude	Elevation(m)	Antenna Height(m)	HAAT(m)	ERP (W)
WQAD635	Corson	N 45 44 43.26, W 100 48 46.91	627.2	50.9	82.9	200
WQAD643	Corson	N 45 44 43.26, W 100 48 46.91	627.2	50.9	82.9	200
WQAD650	McPherson	N 45-43-40.04 N, W 99 05 47.40	606.6	56.7	109.1	160
WQAD652	Herreid	N 45 49 26.33, W 100 01 46.13	529.1	23.5	6.1	270
WQAD653	McPherson	N 45-43-40.04 N, W 99 05 47.40	606.6	56.7	109.1	160
WQAD654	Herreid	N 45 49 26.33, W 100 01 46.13	529.1	23.5	6.1	270
WQAD656	Herreid	N 45 49 26.33, W 100 01 46.13	529.1	23.5	6.1	270
WQAD657	Herreid	N 45 49 26.33, W 100 01 46.13	529.1	23.5	6.1	270
WQAD659	Herreid	N 45 49 26.33, W 100 01 46.13	529.1	23.5	6.1	270
WPVG844	N Minnehaha	N 43 31 56.5, W 96 59 20.11	493.4	25.9	49.1	100
	Orient Hills	N 44 52 27.44, W 99 16 4.51	612.0	21.3	82.9	145
	Winner	N 43 17 46.14, W 99 52 5.02	694.5	25.0	50.9	250
WPVG846	Sioux Falls	N 43 31 49.91, W 96 45 27.25	455.2	18.3	29.9	41
WPVG847	Sioux Falls	N 43 31 49.91, W 96 45 27.25	455.2	18.3	29.9	41
WPVG848	Watertown	N 44 50 52.15, W 97 6 18.72	550.1	23.8	10.1	250
WPVG992	Turkey Ridge	N 43 14 35.88, W 97 22 39.00	520.4	28.3	103.1	170
WPVF200	Sioux Falls	N 43 31 49.91, W 96 45 27.25	455.2	18.3	29.9	41
WPVF202	Yanktown	N 42 50 31.81, W 97 29 4.24	416.3	62.5	74.1	160
	Watertown	N 44 50 52.15, W 97 6 18.72	550.1	23.8	10.1	250
WPVF203	Winner	N 43 17 46.14, W 99 52 5.02	694.5	25.0	50.9	250

[19] *See Order and POM* at p. 21, n. 61.

WPVF204	Brookings	N 44 20 49.78, W 96 43 46.63	513.9	64.0	72.0	150
	Radar Hill	N 43 04 49.04, W 98 28 59.09	565.8	32.0	135.9	60
WPVF205	Yanktown	N 42 50 31.81, W 97 29 4.24	416.3	62.5	74.1	160
	Watertown	N 44 50 52.15, W 97 6 18.72	550.1	23.8	10.1	250
WPVF207	Brookings	N 44 20 49.78, W 96 43 46.63	513.9	64.0	72.0	150
	Sioux Falls	N 43 31 49.91, W 96 45 27.25	455.2	18.3	29.9	41
WPVF208	Beresford	N 43 03 01.48, W 96 47 02.26	460	85.3	135	75

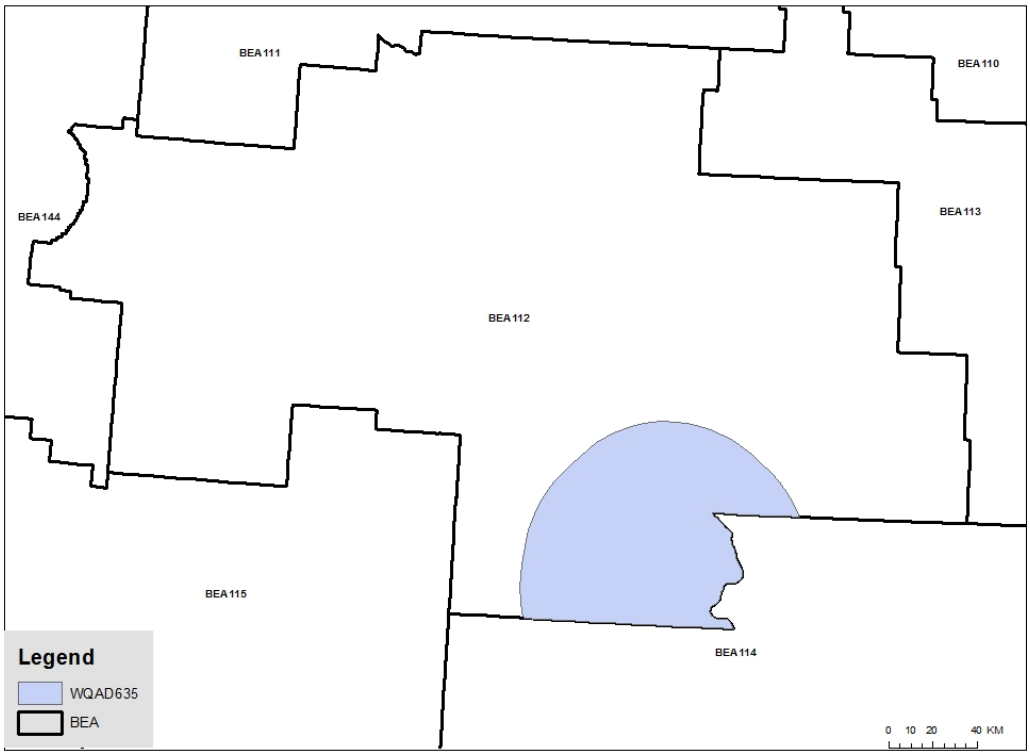
Transmitter Radial Values – per Section 22.567(d)

Location	Azimuth	HAAT (m)	ERP (W)	Distance (km)
Corson	0	59.6	200	62.6
	45	66.8	200	64.3
	90	95.6	200	70.1
	135	123.0	200	74.5
	180	136.0	200	76.3
	225	95.4	200	70.1
	270	48.8	200	59.7
	315	40.9	200	57.2
McPherson	0	64.6	160	61.2
	45	102.7	160	68.4
	90	157.4	160	80.2
	135	156.0	160	80.0
	180	115.4	160	70.3
	225	74.9	160	63.4
	270	72.1	160	62.8
	315	71.6	160	62.7
Herreid	0	3.4	270	56.2
	45	-23.0	270	56.2
	90	-12.6	270	56.2
	135	6.4	270	56.2
	180	33.8	270	57.8
	225	18.1	270	56.2
	270	27.9	270	56.2
	315	25.2	270	56.2
N Minnehaha	0	27.7	100	46.5
	45	42.4	100	50.6
	90	60.1	100	55.0
	135	59.5	100	54.9
	180	70.9	100	57.2
	225	82.1	100	59.3
	270	61.4	100	55.3
	315	30.9	100	46.9

Transmitter Radial Values – per Section 22.567(d)				
Location	**Azimuth**	**HAAT (m)**	**ERP (W)**	**Distance (km)**
Orient Hills	0	68.6	145	60.9
	45	54.9	145	57.7
	90	96.0	145	66.0
	135	104.3	145	67.4
	180	98.5	145	66.4
	225	80.9	145	63.4
	270	48.2	145	56.0
	315	57.2	145	58.3
Winner	0	117.3	250	76.8
	45	97.2	250	73.4
	90	48.6	250	62.2
	135	18.0	250	55.4
	180	4.9	250	55.4
	225	5.2	250	55.4
	270	30.8	250	55.7
	315	83.3	250	70.8
Sioux Falls	0	21.3	41	39.3
	45	53.7	41	45.2
	90	41.5	41	42.5
	135	38.6	41	41.7
	180	28.9	41	39.3
	225	20.9	41	39.3
	270	13.1	41	39.3
	315	18.7	41	39.3
Watertown	0	42.4	250	60.2
	45	26.1	250	55.4
	90	11.6	250	55.4
	135	41.6	250	59.9
	180	43.0	250	60.4
	225	30.8	250	55.7
	270	42.6	250	60.3
	315	46.4	250	61.5
Turkey Ridge	0	85.7	170	66.2
	45	113.1	170	70.8
	90	111.9	170	70.6
	135	57.7	170	60.2
	180	107.8	170	70.0
	225	125.7	170	72.6
	270	111.5	170	70.5
	315	81.1	170	65.4
Yanktown	0	60.3	160	60.2
	45	102.4	160	68.3

Transmitter Radial Values – per Section 22.567(d)				
Location	**Azimuth**	**HAAT (m)**	**ERP (W)**	**Distance (km)**
	90	116.6	160	70.5
	135	64.5	160	61.2
	180	50.0	160	57.5
	225	26.2	160	50.9
	270	111.8	160	69.8
	315	33.8	160	52.4
Brookings	0	57.3	150	58.7
	45	37.0	150	52.9
	90	55.1	150	58.2
	135	73.5	150	62.3
	180	85.5	150	64.6
	225	84.6	150	64.5
	270	83.1	150	64.2
	315	67.8	150	61.1
Radar Hill	0	122.6	60	59.2
	45	139.8	60	61.1
	90	133.4	60	60.4
	135	106.2	60	57.2
	180	166.8	60	70.8
	225	128.1	60	59.8
	270	178.9	60	72.0
	315	95.0	60	55.7
Beresford	0	108.5	75	60.0
	45	95.1	75	58.1
	90	128.2	75	62.4
	135	129.2	75	62.6
	180	136.1	75	63.3
	225	151.0	75	71.4
	270	152.9	75	71.6
	315	149.6	75	64.8

WQAD635 New Market Area



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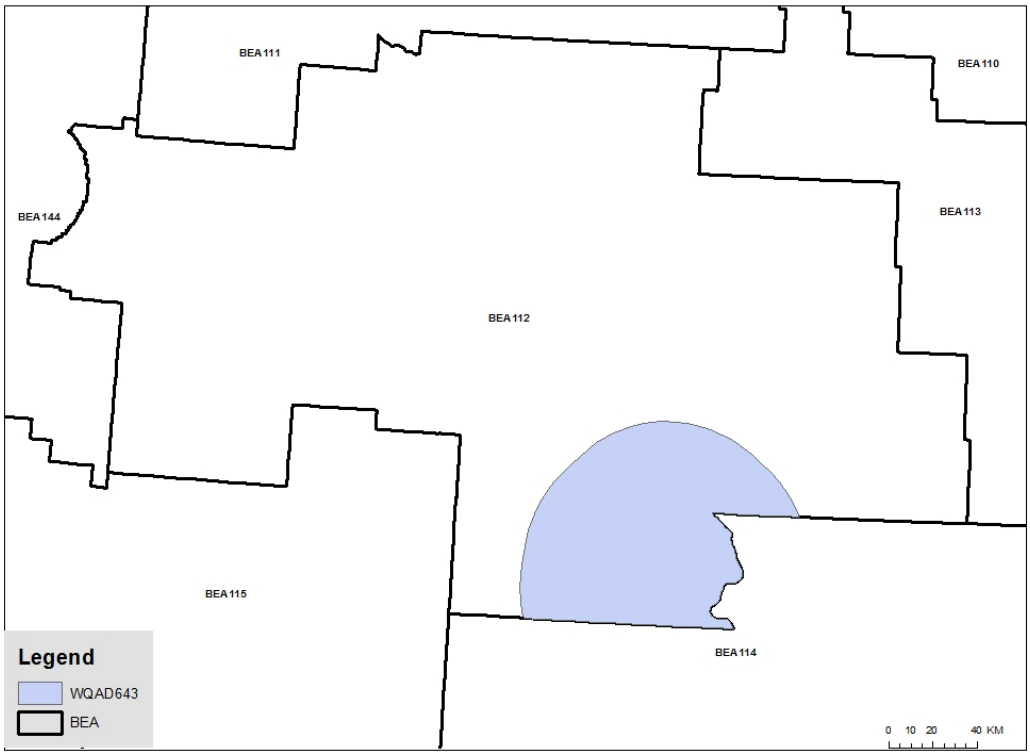
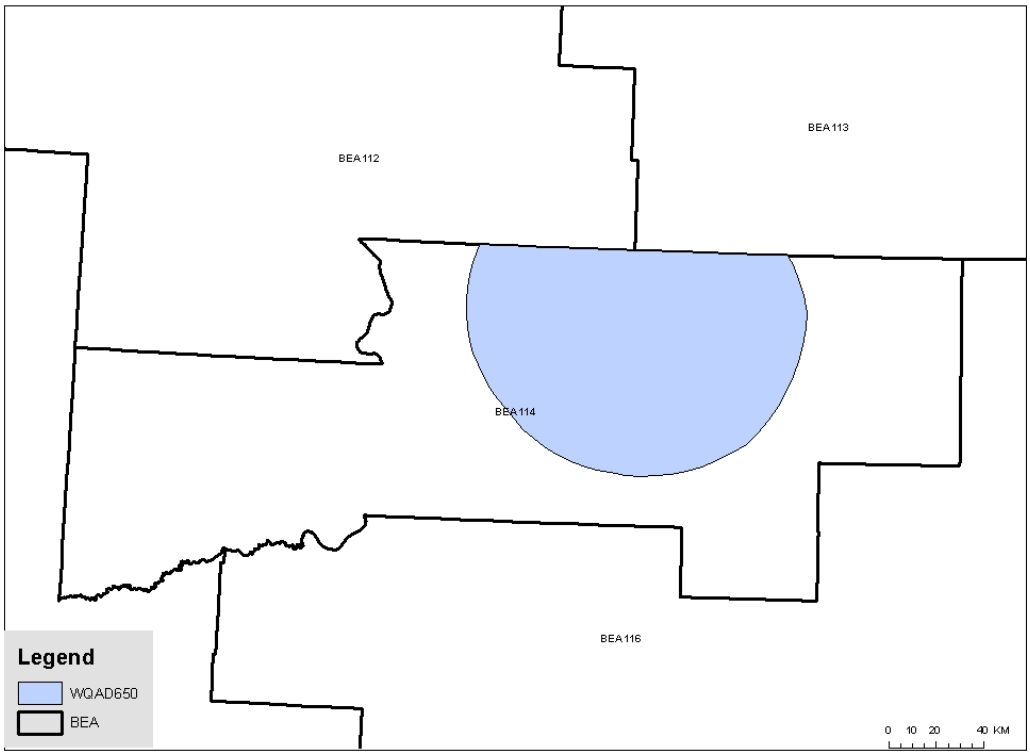


WQAD650 New Market Area



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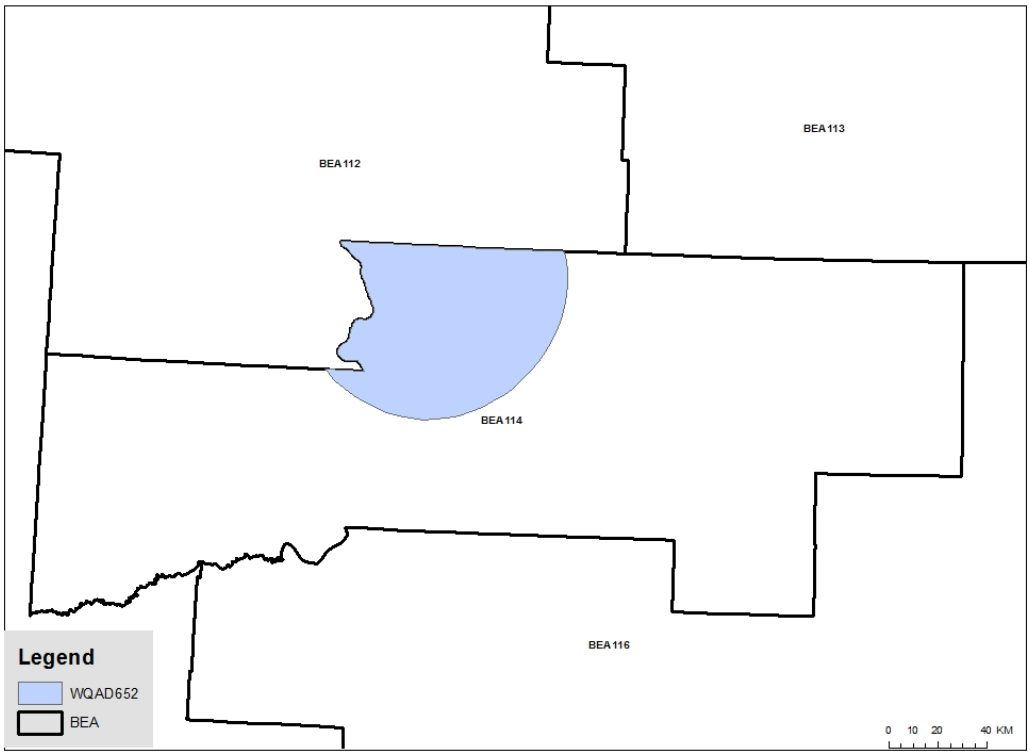

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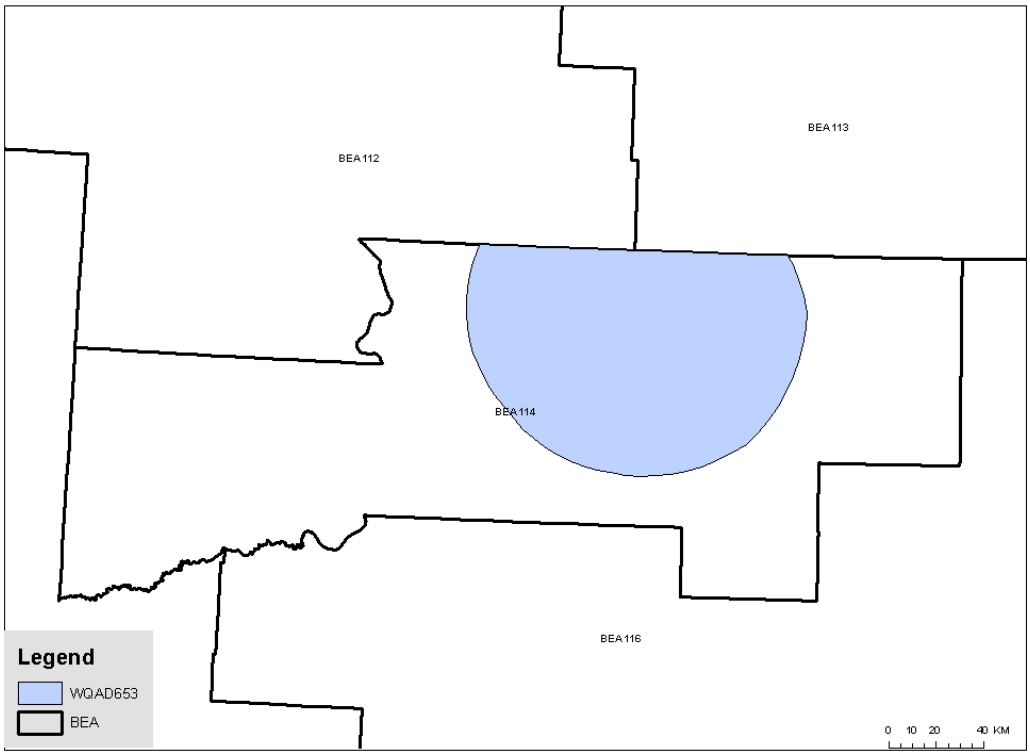

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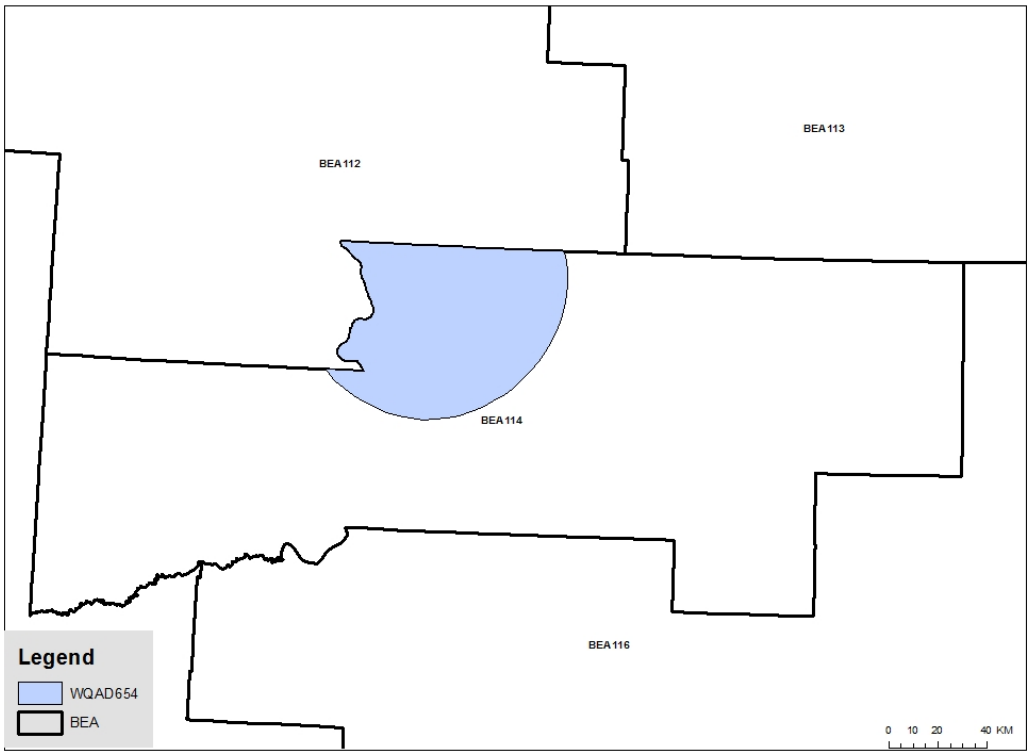

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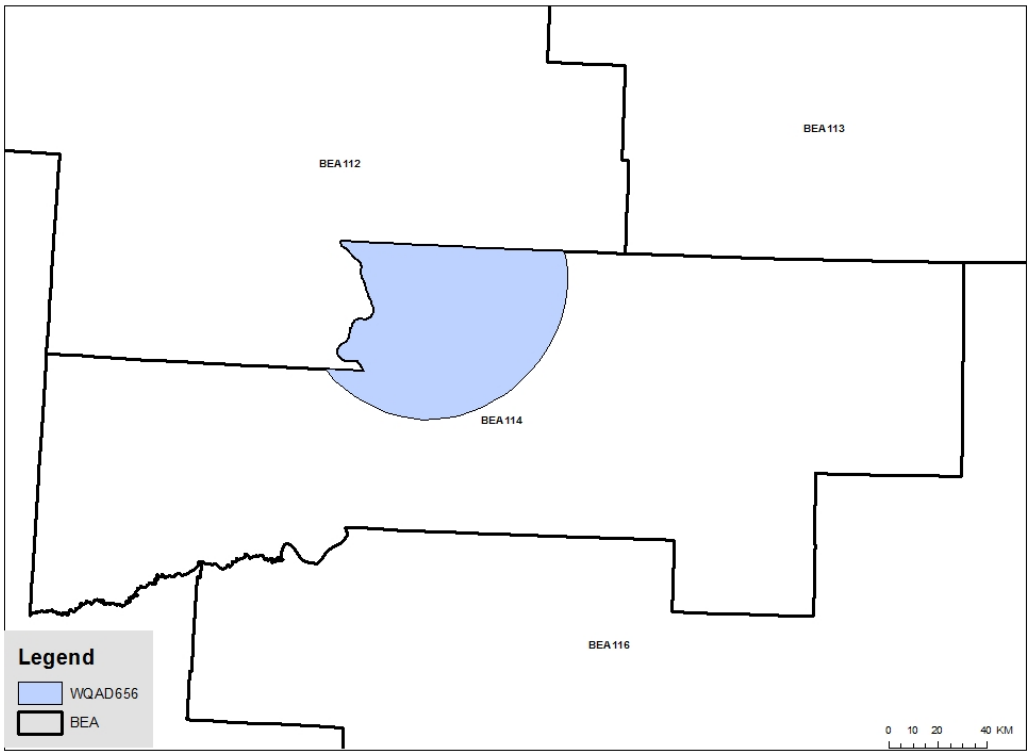

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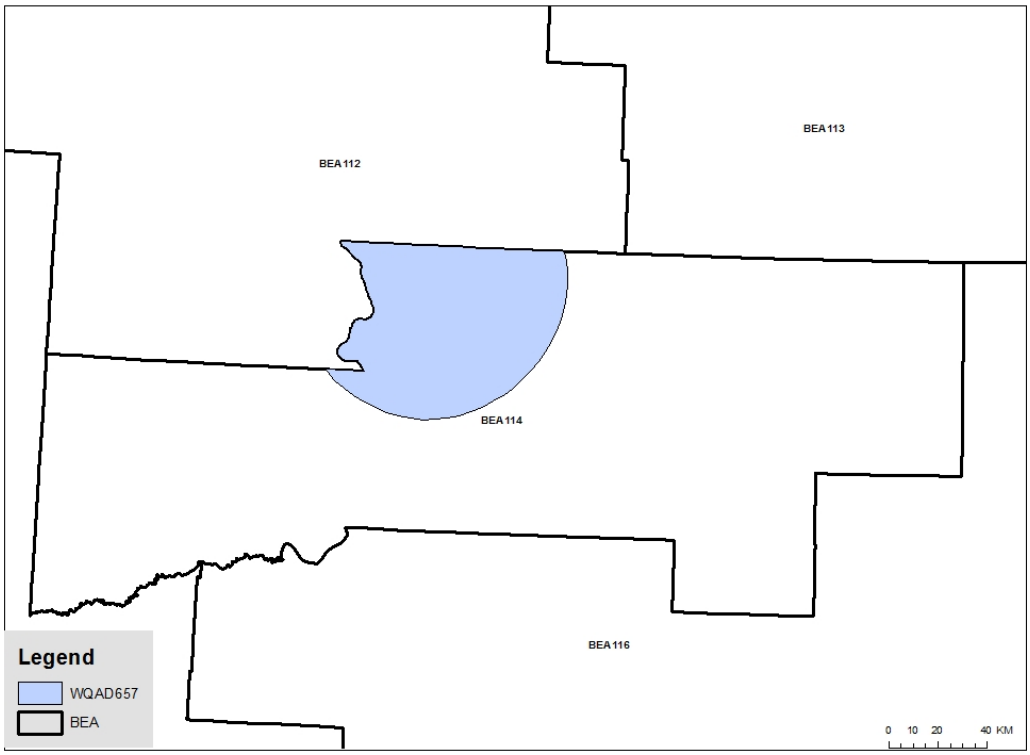

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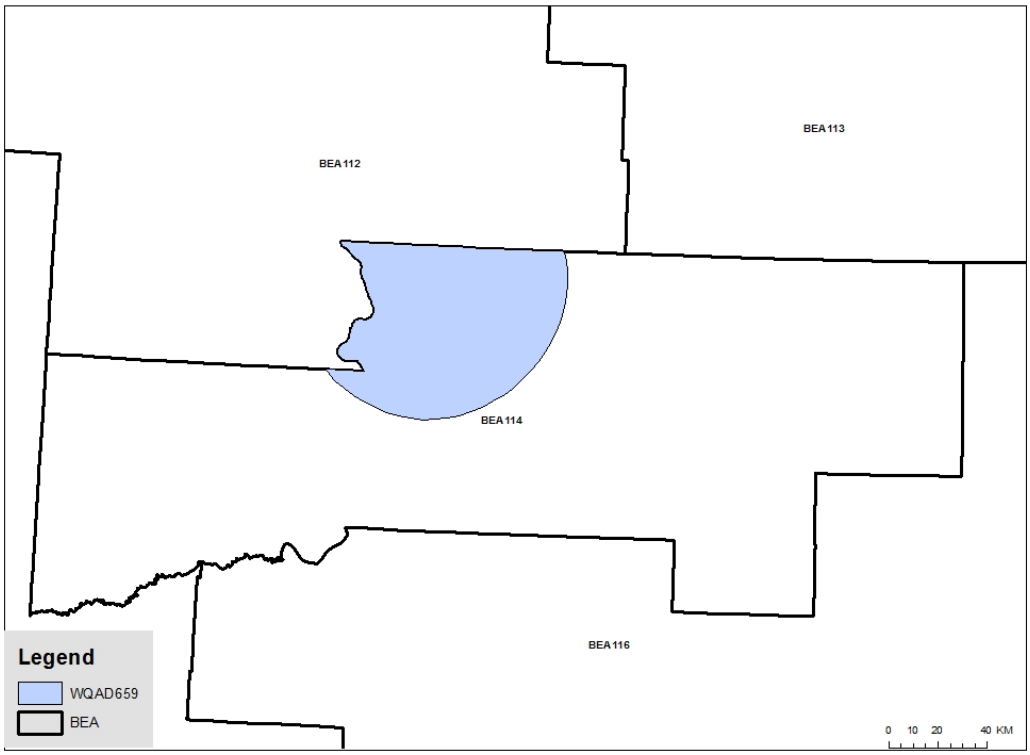

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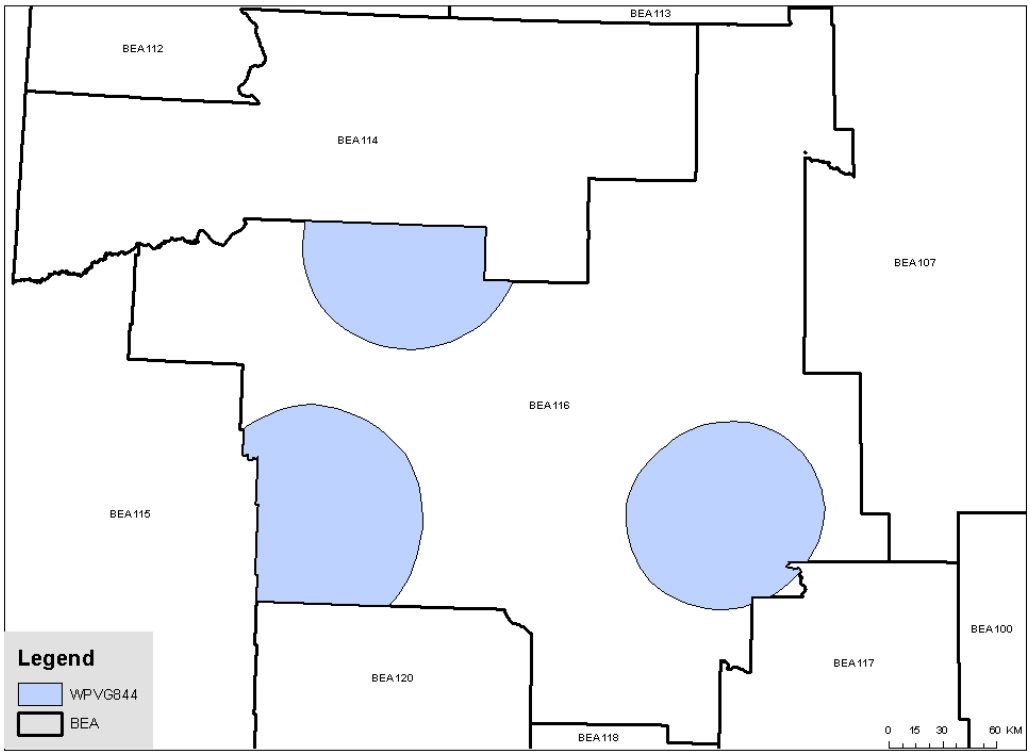

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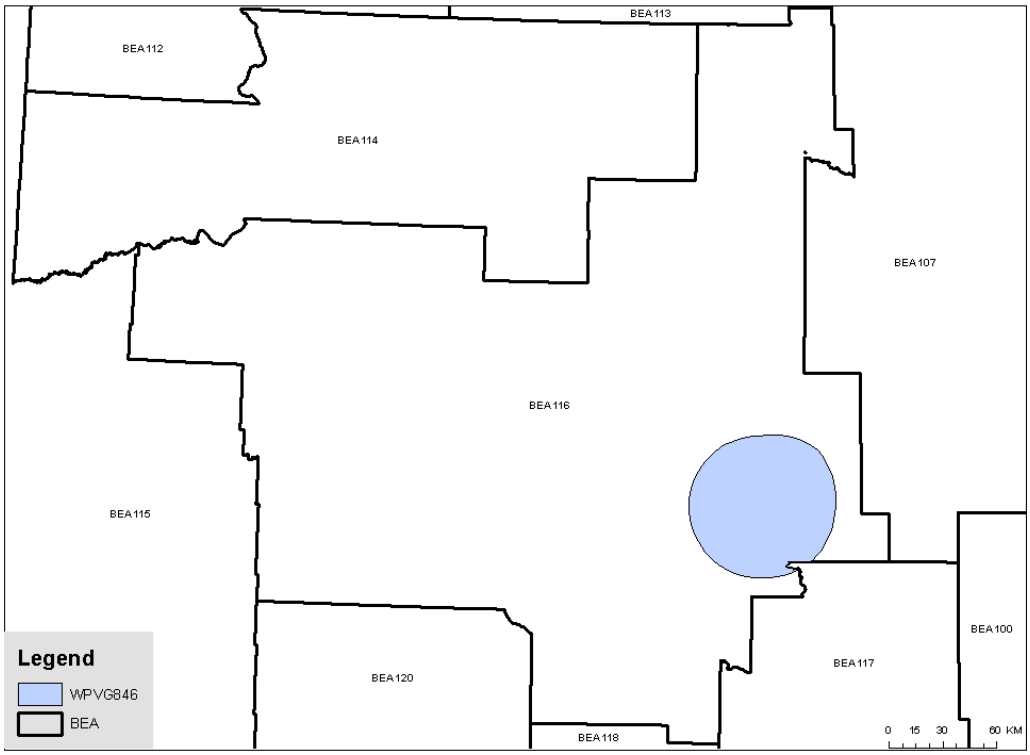

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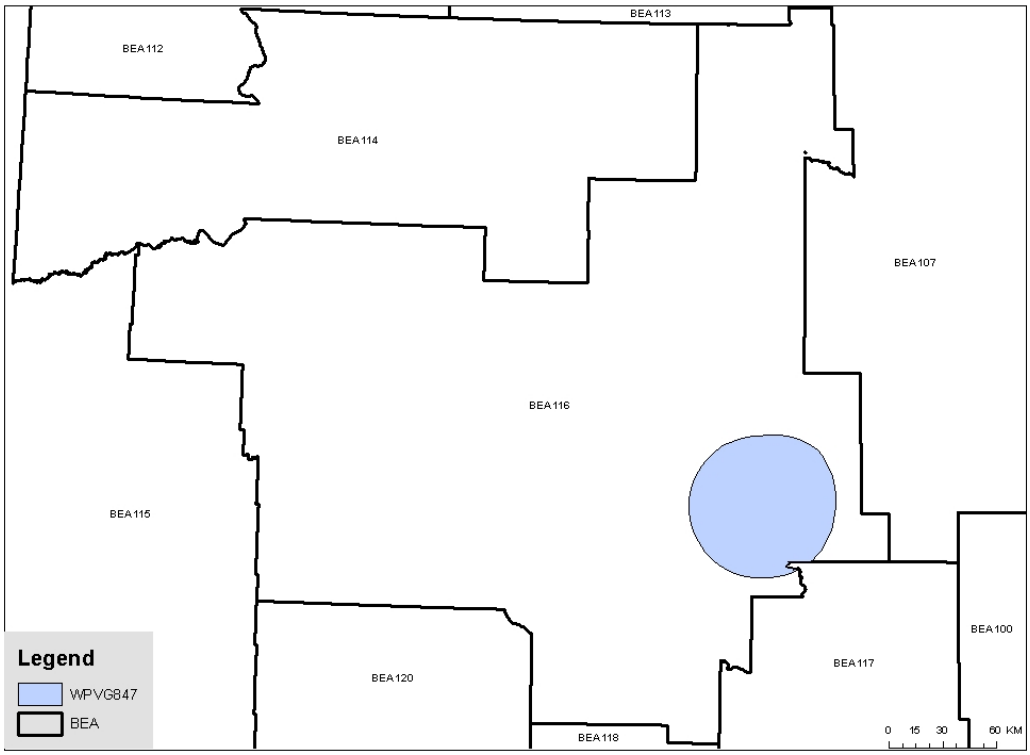

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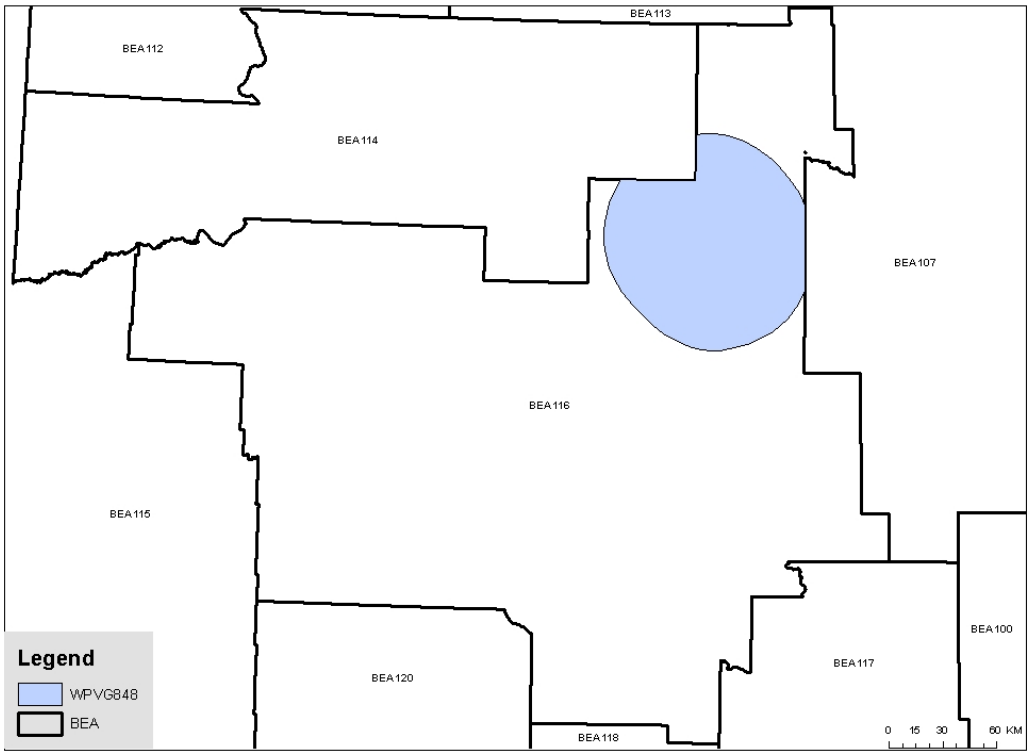

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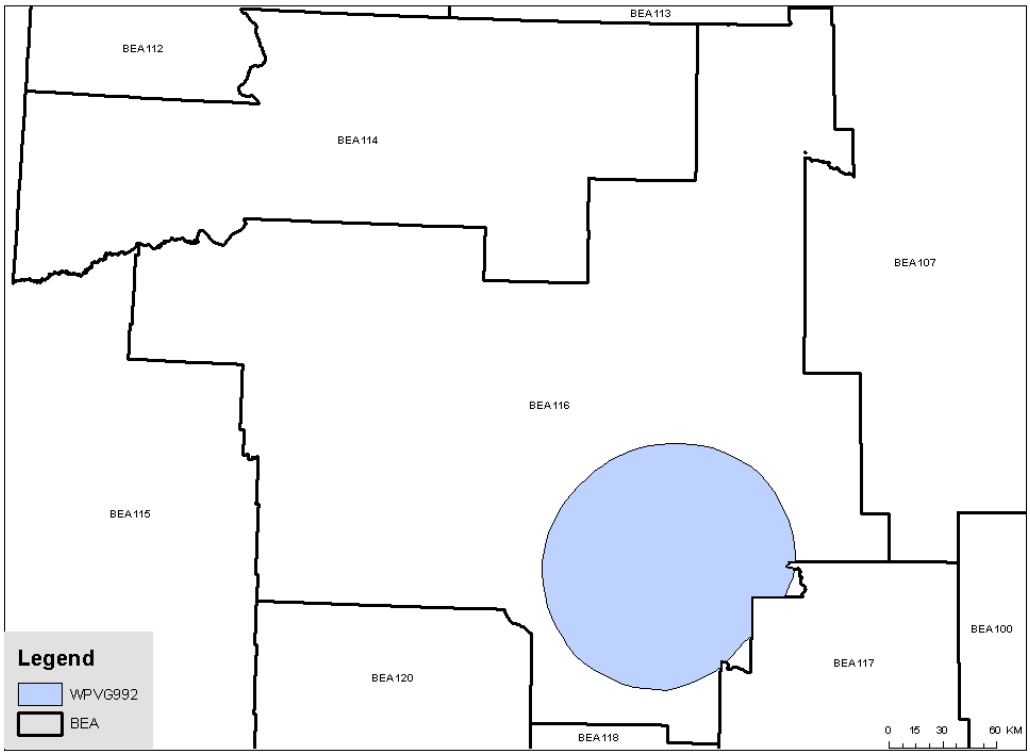
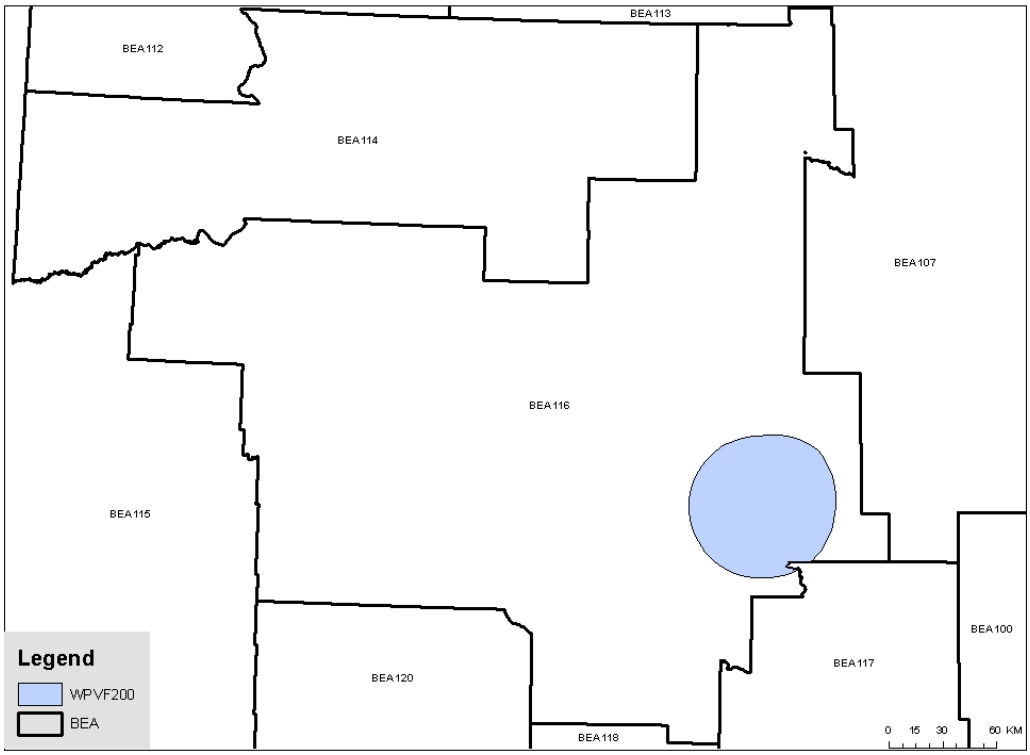


WPVF200 New Market Area



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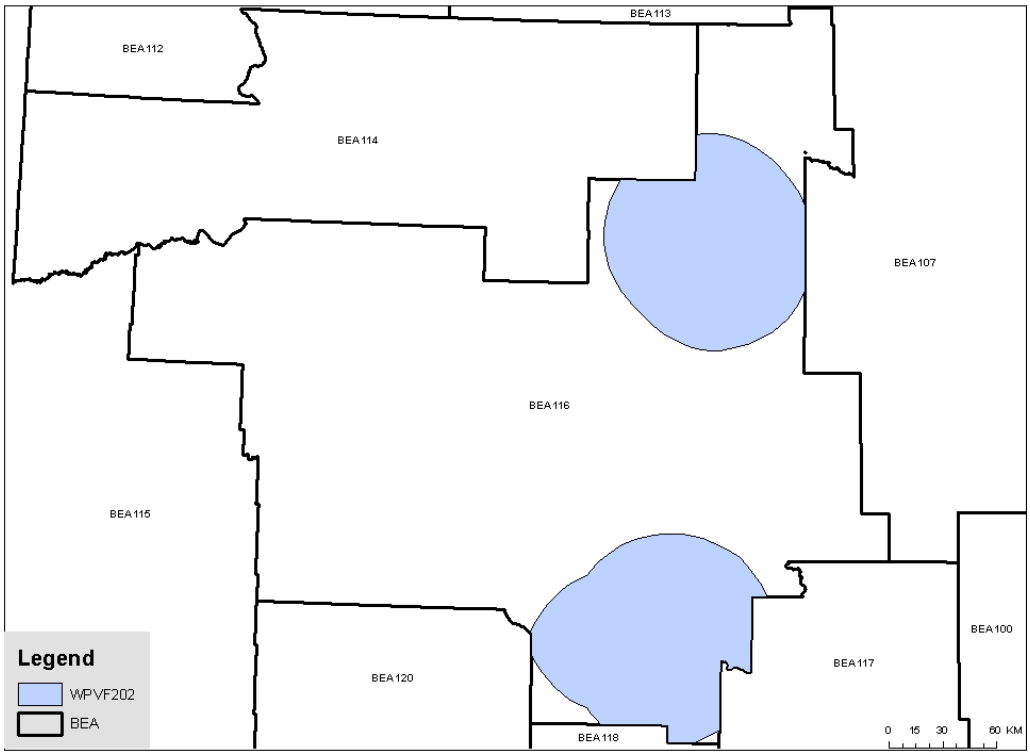

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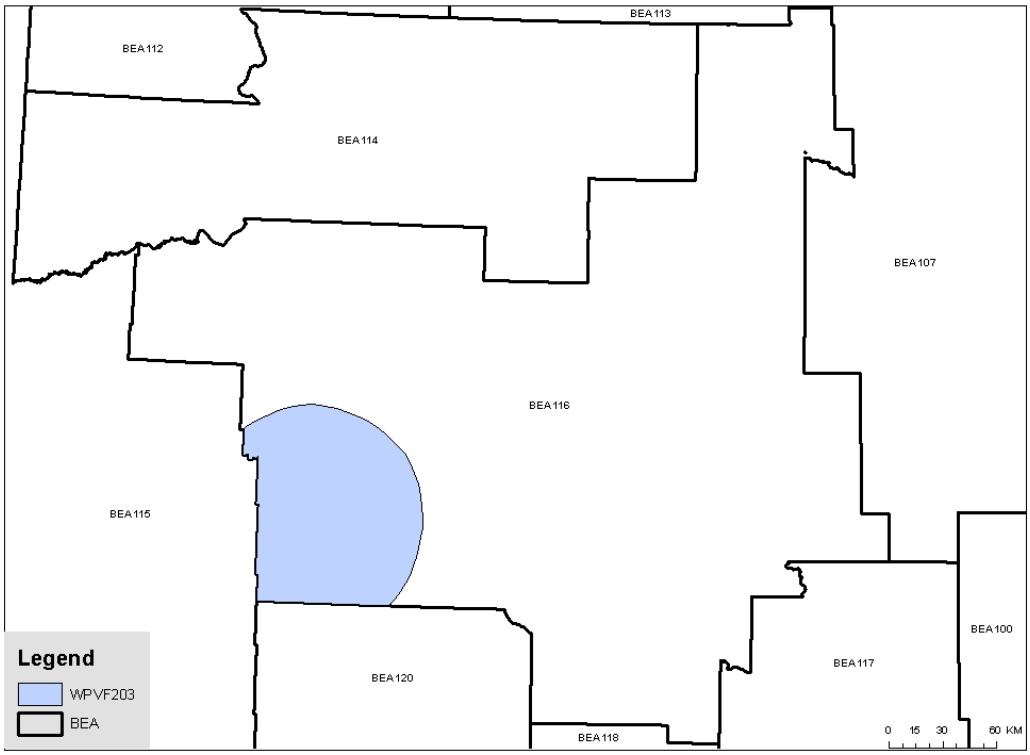
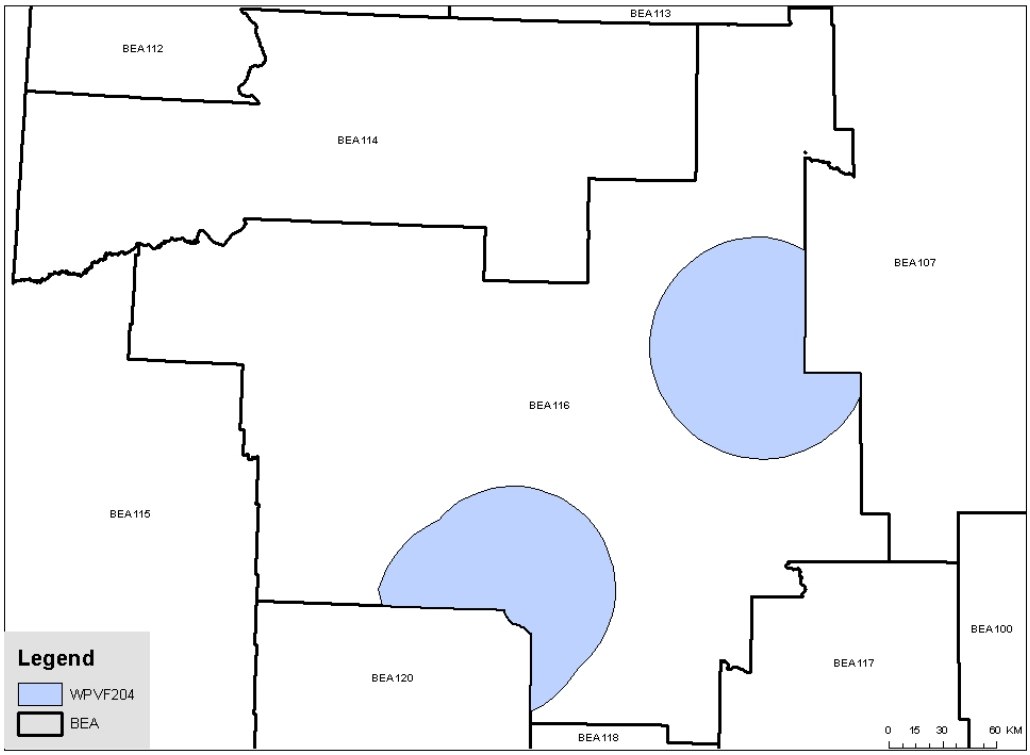
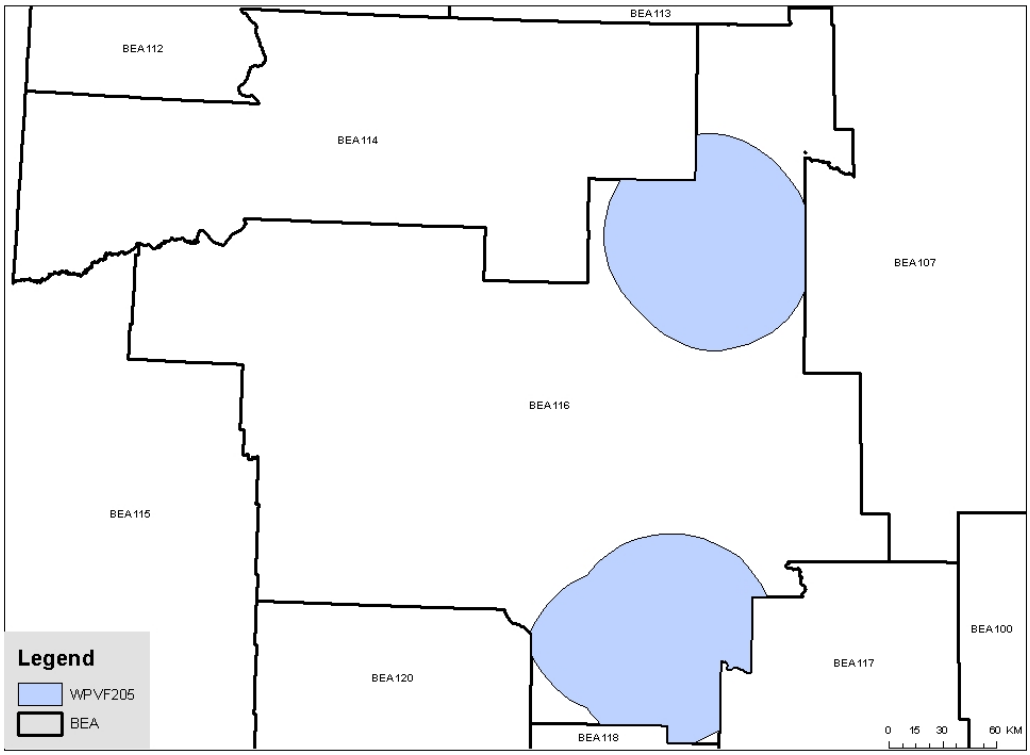


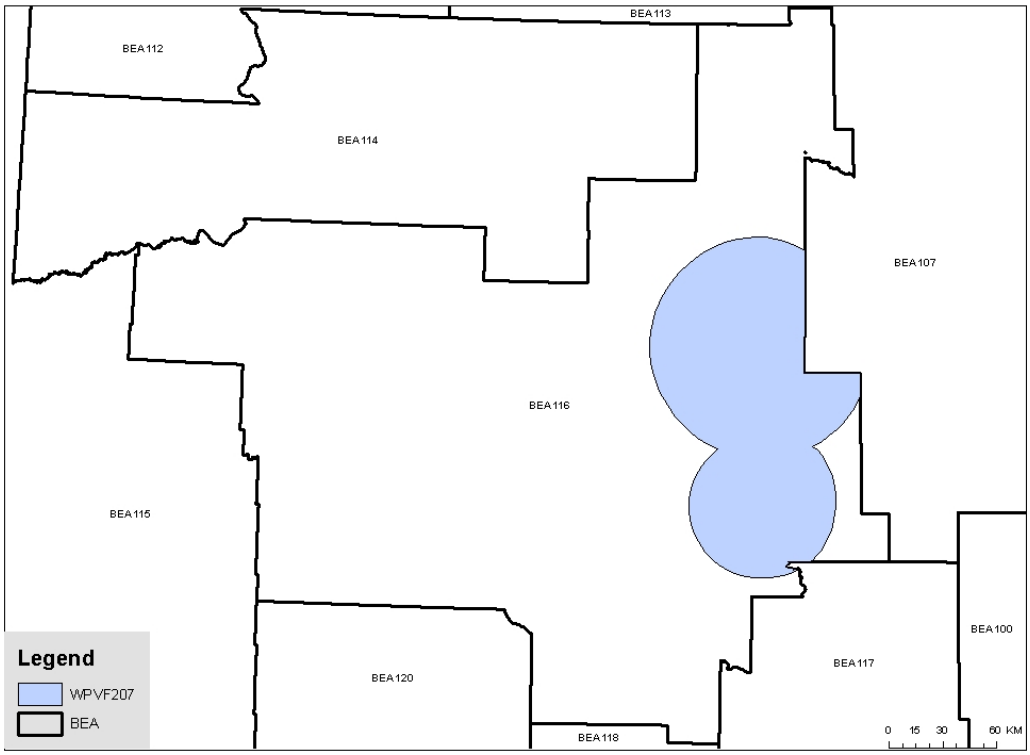
WPVF204 New Market Area



WPVF205 New Market Area



WPVF207 New Market Area



WPVF208 New Market Area